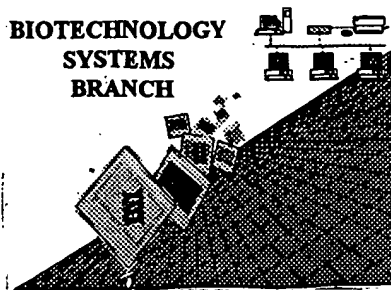


BEST AVAILABLE COPY

5040

#20

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/019,409  
Source: P4/10  
Date Processed by STIC: 1/22/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

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TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)

2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

Or

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202



PCT10

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/019,409

DATE: 01/22/2002  
TIME: 10:40:21

pp 1-3

Input Set : A:\Es.txt  
Output Set: N:\CRF3\01182002\J019409.raw

Does Not Comply  
Corrected Diskette Needed

2 <110> APPLICANT: Japan as Represented by Secretary of Agency of Industrial Science and  
3 Technology  
W--> 4 <120> TITLE OF INVENTION: Sulphur Free Enzyme  
W--> 5 <130> FILE REFERENCE: PH-911-PCT  
W--> 6 <140> CURRENT APPLICATION NUMBER:  
C--> 7 <141> CURRENT FILING DATE: 2001-12-28  
8 <150> PRIOR APPLICATION NUMBER: JP99/183664  
W--> 9 <151> PRIOR FILING DATE: (29-JUN-1999) 1999-06-29 ← use this date format  
W--> 10 <160> NUMBER OF SEQ ID: 10  
11 <170> SOFTWARE: PatentIn Ver. 2.0

*Suggestion: Consult  
Sequence Rules  
for valid  
format*

## ERRORED SEQUENCES

40 <210> SEQ ID NO: 2  
41 <211> LENGTH: 566  
42 <212> TYPE: DNA  
43 <213> ORGANISM: E. coli → *<220> ← insert this mandatory numeric  
identifier  
wherever*  
44 <221> NAME/KEY: CDS  
45 <222> LOCATION: (81)...(557)  
W--> 46 <400> SEQUENCE: 2  
E--> 47 ggatccttga caattagtta actatttgtt ataatgtatt catgagctta actaactaat  
E--> 48 ccggaaaagg aggaacttcc atgatcagtc tgattgcggc gctagcggta gatcgcgtta  
E--> 49 tcggcatgga aaacgccatg ccatggaacc tgcctgccga tctcgccctgg tttaaacgca  
E--> 50 acaccttaaa taaacccgtg attatggggc gccatacctg ggaatcaatc ggtaggcctt  
E--> 51 tgcccggccg caaaaatatt atcctcagca gtcaaccggg gaccgatgat cgggttacct  
E--> 52 ggggttaaate ggtcgacgaa gccatcgccg ccgcagggtga cgtaccagaa atcatgggtga  
E--> 53 ttggcggcgg acgcgtttat gaacagttct tgccaaaagc gcaaaagctt tatctgacgc  
E--> 54 atatcgatgc agaagtggaa ggcgacaccc attttccgga ttacgagccg gatgactggg  
E--> 55 aatcggtatt cagcgaattc cagcatgctg atgcgcagaa ctgcgatagc tattcggttcg  
E--> 56 aaatcctcga gcgtcggttaa ggatcc  
90 <210> SEQ ID NO: 4  
91 <211> LENGTH: 558  
92 <212> TYPE: DNA  
93 <213> ORGANISM: B. subtilis → *<220> ← insert*  
94 <221> NAME/KEY: CDS  
95 <222> LOCATION: (1)...(555)  
W--> 96 <400> SEQUENCE: 4  
E--> 97 gctagcacag actactggca aaattggact gatgggggcg gtatagtaaa cgctgtcaat  
E--> 98 ggggtctggcg ggaattacag tgtaattgg tctaataccg gaaattttgt tgttggttaa  
E--> 99 gggttgacta caggttcgcc atttaggacg ataaactata atgccggagt ttggcgccg  
E--> 100 aatggcaatg gatatttaac tttatatggt tggacgagat cacctctcat agaattattat  
E--> 101 gtagtggatt catgggggtac ttatagacct actggaacgt ataaaggtac tgtaaaaaagt

60  
120  
← 2217, 2227, or  
2237 is  
shown  
insert  
cumulative  
nucleotide total  
at right margin  
of each line

*same error as  
above*

## RAW SEQUENCE LISTING

DATE: 01/22/2002

PATENT APPLICATION: US/10/019,409

TIME: 10:40:21

Input Set : A:\Es.txt

Output Set: N:\CRF3\01182002\J019409.raw

E--> 102 gatgggggta catatgacat atatacaact acacgttata acgcaccttc cattgatggc  
 E--> 103 gatcgacta cttttacgca gtactggagt gttcgccagt cgaagagacc aaccggaagc  
 E--> 104 aacgctacaa tcactttcag caatcatgtg aacgcatgga agagccatgg aatgaatctg  
 E--> 105 ggcagtaatt gggcttacca agtcatggcg acagaaggat atcaaagtag tggctcgtcg  
 E--> 106 aatgtttaccg tatggtaa

*same*

136 &lt;210&gt; SEQ ID NO: 6

137 &lt;211&gt; LENGTH: 569

138 &lt;212&gt; TYPE: DNA

139 &lt;213&gt; ORGANISM: E. coli

140 &lt;221&gt; NAME/KEY: CDS

141 &lt;222&gt; LOCATION: (81)...(560)

*>L2207*

W--&gt; 142 &lt;400&gt; SEQUENCE: 6

E--> 143 ggatccttga caattagtta actatttggtt ataatgtatt catgagctta actaactaat  
 E--> 144 ccggaanaagg aggaacttcc atggcaatca gtctgattgc ggcgctagcg gtagatcgcg  
 E--> 145 ttatcggaac cgaaaacgcc ctcccatgga acctgcctgc cgatctcgcc tggtttaaac  
 E--> 146 gcaacacctt aaataaaccc gtgatttacg ggcgccatac ctgggaatca atcggtaggc  
 E--> 147 ctttgcccg cgcaaaaat attatcctca gcagtcaacc cgggaccgat gatcgggtta  
 E--> 148 cctgggttaa atcggctcgac gaagccatcg cggcgcgagg tgacgtacca gaaatcttcg  
 E--> 149 tgattggcgg cggaacggtt tatgaacagt tcttgccaaa agcgcaaaaag ctttatctga  
 E--> 150 cgcatatcga tgcagaagtg gaaggcgaca cccattttcc ggattacgag ccggatgact  
 E--> 151 ggggaatcggt attcagcgaa ttccacgatg ctgatgcgca gaactcgcat agctattcgt  
 E--> 152 tcgaaatcct cgagcgtcgt taaggatcc

*same  
error**as above*

208 &lt;210&gt; SEQ ID NO: 8

209 &lt;211&gt; LENGTH: 1153

210 &lt;212&gt; TYPE: DNA

W--> 211 <213> ORGANISM: ← MANDATORY response needed (this error also exists in Seqs 7-10)

W--&gt; 212 &lt;400&gt; SEQUENCE: 8

E--> 213 ggatccttga caattagtta actatttggtt ataatgtatt catgagctta actaactaat  
 E--> 214 ccggaanaagg aggaacttcc atggcaatca gtctgattgc ggcgctagcg gtagatcgcg  
 E--> 215 ttatcggaac cgaaaacgcc ctcccatgga acctgcctgc cgatctcgcc tggtttaaac  
 E--> 216 gcaacacctt aaataaaccc gtgatttacg ggcgccatac ctgggaatca atcggtaggc  
 E--> 217 ctttgcccg cgcaaaaat attatcctca gcagtcaacc cgggaccgat gatcgggtta  
 E--> 218 cctgggttaa atcggctcgac gaagccatcg cggcgcgagg tgacgtacca gaaatcttcg  
 E--> 219 tgattggcgg cggaacggtt tatgaacagt tcttgccaaa agcgcaaaaag ctttatctga  
 E--> 220 cgcatatcga tgcagaagtg gaaggcgaca cccattttcc ggattacgag ccggatgact  
 E--> 221 ggggaatcggt attcagcgaa ttccacgatg ctgatgcgca gaactcgcat agctattcgt  
 E--> 222 tcgaaatcct cgagcgtcgt ggtggcggtg gctcgggtgg tggcgcgct agcacagact  
 E--> 223 actggcaaaa ttggactgat gggggcggtta tagtaaacgc tgtcaatggg tctggcgga  
 E--> 224 attacagtgt taattggtct aataccggaa attttggtgt tggtaaagggt tggactacag  
 E--> 225 gttcgccatt taggacgata aactataatg ccggagtttg ggcgcgcaat ggcaatggat  
 E--> 226 atttaacttt atatggttg acgagatcac ctctcataga atattatgta gtggattcat  
 E--> 227 ggggtactta tagacctact ggaacgtata aaggtactgt aaaaagtgat gggggtacat  
 E--> 228 atgacatata tacaactaca cgttataacg cactttccat tgatggcgat cgcactactt  
 E--> 229 ttacgcagta ctggagtgtt cgccagtcga agagaccaac cggaagcaac gctacaatca  
 E--> 230 ctttcagcaa tcatgtgaac gcatggaaga gccatggaat gaatctgggc agtaattggg  
 E--> 231 cttaccaagt catggcgaca gaaggatatc aaagtagtgg ctcgtcgaat gttaccgtat  
 E--> 232 ggtaaggatc ccc

*same  
error  
(insert  
cumulative  
nucleotide  
totals)*

288 &lt;210&gt; SEQ ID NO: 10

289 &lt;211&gt; LENGTH: 1153

*P.3*

## RAW SEQUENCE LISTING

DATE: 01/22/2002

PATENT APPLICATION: US/10/019,409

TIME: 10:40:21

Input Set : A:\Es.txt

Output Set: N:\CRF3\01182002\J019409.raw

290 <212> TYPE: DNA  
W--> 291 <213> ORGANISM: *← insert mandatory sequence*  
W--> 292 <400> SEQUENCE: 10  
E--> 293 ggatccttga caattagtta actatttggtt ataatgtatt catgagctta actaactaat  
E--> 294 ccggaagagg aggaacttcc atggcaatca gtctgattgc ggcgctagcg gtagatcgcg  
E--> 295 ttatcgccaa cgaaaacgcc ctcccatgga acctgcctgc cgatctcgcc tggtttaaac  
E--> 296 gcaacacctt aaataaaccc gtgatttacg ggcgccatac ctgggaatca atcggtaggg  
E--> 297 ctttgcccg cgcacaaaat attatctctca gcagtcaacc cgggaccgat gatcgggtta  
E--> 298 cctgggttaa atcggtcgac gaagccatcg cggccgcagg tgacgtacca gaaatcttgc  
E--> 299 tgattggcgg cggacgcgtt tatgaacagt tcttgccaaa agcgcaaaag ctttatctga  
E--> 300 cgcataatga tgcagaagtg gaaggcgaca cccattttcc ggattacgag ccggatgact  
E--> 301 gggaatcggt attcagcgaa ttccacgatg ctgatgcgca gaactcgcac agctattcgt  
E--> 302 tcgaaatcct cgagcgtcgt ggtggcggtg gctcgggtgg tggcgccgct agcacagact  
E--> 303 actggcaaaa ttggactgat gggggcggtg tagtaaacgc tgtcaatggg tctggcggtg  
E--> 304 attacagtgt taattggtct aataccggaa attttggtgt tggtaaagggt tggactacag  
E--> 305 gttcgccatt taggacgata aactataatg ccggagtttg ggcgccgaat ggcaatggat  
E--> 306 atttaacttt atatggttgg acgagatcac ctctcataga atattatgta gtggattcat  
E--> 307 ggggtactta tagacctact ggaacgtata aaggtactgt aaaaagtgat gggggtacat  
E--> 308 atgacatata tacaactaca cgttataacg caccctccat tgatggcgat cgcactactt  
E--> 309 ttacgcagta ctggagtgtt cgccagtcga agagaccaac cggaagcaac gctacaatca  
E--> 310 ctttcagcaa tcatgtgaac gcatggaaga gccatggact caatctgggc agtaattggg  
E--> 311 cttaccaagt catcgcgaca gaaggatata aaagtagtgg ctctcgcaat gttaccgtat  
E--> 312 ggtaaggatc ccc

*insert  
cumulative  
totals  
at right  
margin of  
each line*

## VERIFICATION SUMMARY

DATE: 01/22/2002

PATENT APPLICATION: US/10/019,409

TIME: 10:40:22

Input Set : A:\Es.txt

Output Set: N:\CRF3\01182002\J019409.raw

L:4 M:283 W: Missing Blank Line separator, <120> field identifier  
L:5 M:283 W: Missing Blank Line separator, <130> field identifier  
L:6 M:283 W: Missing Blank Line separator, <140> field identifier  
L:7 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:9 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:10 M:283 W: Missing Blank Line separator, <160> field identifier  
L:12 M:283 W: Missing Blank Line separator, <210> field identifier  
L:16 M:283 W: Missing Blank Line separator, <400> field identifier  
L:46 M:283 W: Missing Blank Line separator, <400> field identifier  
L:47 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:2  
M:254 Repeated in SeqNo=2  
L:62 M:283 W: Missing Blank Line separator, <400> field identifier  
L:96 M:283 W: Missing Blank Line separator, <400> field identifier  
L:97 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:4  
M:254 Repeated in SeqNo=4  
L:112 M:283 W: Missing Blank Line separator, <400> field identifier  
L:142 M:283 W: Missing Blank Line separator, <400> field identifier  
L:143 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:6  
M:254 Repeated in SeqNo=6  
L:157 M:201 W: Mandatory field data missing, <213> ORGANISM  
L:158 M:283 W: Missing Blank Line separator, <400> field identifier  
L:211 M:201 W: Mandatory field data missing, <213> ORGANISM  
L:212 M:283 W: Missing Blank Line separator, <400> field identifier  
L:213 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:8  
M:254 Repeated in SeqNo=8  
L:237 M:201 W: Mandatory field data missing, <213> ORGANISM  
L:238 M:283 W: Missing Blank Line separator, <400> field identifier  
L:291 M:201 W: Mandatory field data missing, <213> ORGANISM  
L:292 M:283 W: Missing Blank Line separator, <400> field identifier  
L:293 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:10  
M:254 Repeated in SeqNo=10